

CTSC 5740

Systematic Reviews and Meta-Analysis

Faculty: Victor Montori, MD, MSc, Colin West, MD, PhD, and M. Hassan Murad, MD

Credits: 2

Quarter: Winter

Prerequisites: CTSC 5600, CTSC 5300, CTSC 5310

Overview

By the end of this problem-based course, the learner will be comfortable with the methods of evidence synthesis and will have completed a systematic review/meta-analysis, from protocol to journal-ready manuscript, in a topic of their choice. The course will consist of 11 weekly two-hour small group tutorials with expert faculty to discuss key concepts and troubleshoot the scholars' reviews in progress. Each session will represent a step in conducting a systematic review. A series of selected readings for each session will help students prepare to participate in discussions. There will be two practical sessions: one for developing thorough and systematic search strategies, in coordination with Mayo Library; the other for learning how to use meta-analysis software.

Objectives

- To utilize the methods of evidence syntheses
- To complete a systematic review
- To defend analyses, including how to explain heterogeneity

Evaluation

Grades will be based 100% on the evaluation of the scientific quality of a journal-ready systematic review due at the end of quarter on the topic of the student's choice. The grade will be the average of assessments made by the course director and by a peer student, with both using the same 7-point validated evaluation form. This evaluation form will be available to the students on the first day.

Students will be expected to spend approximately four to six hours per week on content from this 2-credit course.